patch testing for allergy is given, also a warning against interpreting as positive, reactions which are due to the primary irritation effects of the substance. This is followed up, at the end of the book, by a long list of recommended concentrations of potential allergens in suitable solvents for patch testing. As the authors say, there is no theoretical basis at present for determining suitable concentrations, and the list is based on the personal experience of a dermatologist experienced in this field.

Various plastics are then described, dealing with the industrial toxicology and skin hazards and ending with a well classified survey of the auxiliary substances, and the toxicology of those substances likely to be a risk to health.

Both authors are experienced in industry and their approach is eminently practical, both with regard to the potential dangers in use and methods of prevention.

Inevitably, in a book of this size, the whole subject is not covered. Polycarbonates and polyformaldehyde are not included. Synthetic rubbers were deliberately excluded, as this would presumably have widened the scope of the book too much. Another volume dealing with health hazards in the rubber industry, including both synthetic and natural substances, might be a useful addition to this series.

The chapter dealing with auxiliary substances is an excellent guide to the probable nature of these substances, even though they are not dealt with individually, but this treatment seems wise since new members of this group are introduced with great frequency.

This book critically reviews and brings together in an easily readable form a large amount of information, which will be invaluable to doctors, chemists, and those in charge of plastics manufacture.

The problem of indexing a book is always difficult. One could have wished for the inclusion of clinical symptoms, instead of a list limited to the chemical substances mentioned in the text.

Since this book is a translation from the Dutch, the authors and editors are to be congratulated on a very readable book.

D. MALCOLM

The Perceptanalytic Executive Scale. By Z. Piotrowski and M. Rock. (Pp. 228; 42s.) New York and London: Grune & Stratton. 1963.

Professor Piotrowski is a distinguished clinical psychologist who has made a life-long study of the Rorschach inkblot test. He is also research director of a Philadelphia firm of management consultants, in very close contact with problems of top management. Both interests are combined in *The Perceptanalytic Executive Scale*, produced in collaboration with Dr. Rock and other consultant colleagues. The scale consists of 32 'signs' derived from Rorschach records. Some of the signs are straightforward (such as a lack of form-colour responses in a record), while others are more complex and interpretative. Fifteen signs are claimed to be related to executive success, the remaining 17 to failure. The justification for this claim is that the signs individually and collectively discriminate between groups of successful and unsuccessful

top managers in a sample drawn from the consultants' files. For such an elusive group as top managers, the sample is encouragingly large; 52 successful, 42 unsuccessful, and 16 'intermediate'. It is important to note that most of the failures were only relative failures. Although they had failed at their top jobs, they had reached the top in the first place, often against strong competition. In short, the authors were tackling a tricky problem in discrimination.

The signs used in the scale are extremely varied, and only brief indications can be given here. The perception of human movement in the blots was closely linked with success, when the movements had such qualities as expansiveness, strength, confidence, and co-operation. But aggressive animal responses were also found to be favourable. On a more formal level, constructive, well-integrated responses produced at unvarying speed without undue self-criticism were linked with success.

Clearly, one cannot place great reliance on a scale derived from differences in one sample, and not cross-validated on an independent sample. But there seem to be good reasons to support one's hope that a later validation might prove successful. The authors have made careful reliability checks; they give abundant illustrations of their methods; the scale achieves a reasonably sharp discrimination within a highly able and challenging test-group; many of the signs make sense both psychologically and in relation to previous research; and, not least, there are 10 detailed case studies of successful and unsuccessful executives which link Rorschach signs and life-history material very convincingly.

J. F. MORRIS

Ruptures of the Lumbar Intervertebral Disc. By R. Eustace Semmes. (Pp. 80; 39 figs.; \$6.) Illinois: Charles C. Thomas. 1964.

At a recent joint meeting of two well-known societies of neurological surgeons, one of the most popular sessions was that occupied by a series of papers presented under the general title 'How I Do It'. This book epitomizes Dr. Semmes' views on the management of cases of prolapsed lumbar intervertebral disc. He has operated, it seems, on more than 6,000: it is a pity that he does not also tell us how many he treated conservatively. The tone of the book is practical; there are few references to the literature, and all except one of these is American.

The clinical findings and diagnosis of the condition are adequately dealt with, though Dr. Semmes feels more confidence than your reviewer that lesions of the fourth and fifth lumbar discs can be differentiated by the exact pattern of radiation of sciatic pain. Most people will agree with him that myelography is rarely required. However, not everyone will share Dr. Semmes' view that one can identify a syndrome of stiff painful back in which after conservative measures have failed, surgical exploration will show 'practically without exception' a central rupture of a disc which can be removed with 'very satisfactory' post-operative results.

The technique of operation is described in considerable detail. Few British surgeons will share Dr. Semmes' enthusiasm for local anaesthesia, and it is not clear how

this enables the surgeon to 'protect . . . the underlying major vessels' (which should not be encountered), nor how deliberate pressure on the abdominal veins during the operation 'in order to render the epidural veins more visible . . . makes it easier to avoid injuring (the latter)'. Dr. Semmes is curiously conservative about bilateral exposure, even when the leg pain itself is bilateral. He rightly stresses an adequate removal of disc tissue and a routine exploration of two disc spaces. Dr. Semmes is opposed—probably rightly—to the routine use of spinal fusion in the management of disc lesions, but his discussion of this point is too brief and dogmatic to be very helpful.

In describing his results, Dr. Semmes has analysed the results of a questionnaire circulated to 3,000 patients, taking (apparently arbitrarily) the first 1,500 answers received. Although the great majority of patients felt benefited by their operation, only 48% were completely relieved of backache and 53% of sciatica. Just over 6% of the patients required a second operation. Although it is said that 72% of the patients are back in their original employment and that 12% are doing heavy work, we are not told how many had been doing heavy work before operation, nor is there any way of deducing this from the figures given.

This book will be read with interest by those who are engaged in the management of the lumbago-sciatica syndrome as the point of view of a sensible and experienced clinician. Unfortunately for the surgeon-in-training, there is no adequate survey of the views and methods of others.

A. N. GUTHKELCH

Occupational Disability and Public Policy. Edited by Earl F. Cheit and Margaret S. Gordon. (Pp. 437; 90s.) London and New York: John Wiley. 1963.

This book, one of a series from the Research Programme of the Institute of Industrial Relations, University of California, has as its hopeful purpose the reduction of the gap between Workmen's Compensation critics and the mood of the state legislature in the United States of America.

The work consists of essays by 14 authors, including the two editors, dealing with major policy issues relating to the industrially disabled. Although the work is intended mainly for readers in the United States of America, the student of the social and economic consequences of industrially induced disablement in any country will find much to interest him. The two chapters in Part 2 dealing with foreign experience both before and after the second world war are to be commended to readers in this country. It is a sad fact that, although the National Insurance (Industrial Injuries) Act has been in operation here for more than 15 years, the general public, including the medical profession, is still largely ignorant of its detailed provisions. The more people in this country, both medical and lay, who are informed of the basic facts of past and present provisions for the industrially disabled in this and other countries, the better the outlook for future developments will be.

J. WATKINS-PITCHFORD

The Handicapped School-Leaver. Report of a Working Party Commissioned by the British Council for the Rehabilitation of the Disabled. (Pp. 172; 15s.) London: The British Council for Rehabilitation of the Disabled. 1964.

These two reports, one for England and Wales and one for Scotland, were commissioned to investigate the needs of physically and mentally handicapped school-leavers, to study means of meeting their needs, and to make recommendations. They are to be welcomed for drawing attention to these problems, which concern at least 3-6% of school-leavers, and no doubt it would be expecting too much of a slim paperback volume to look for complete answers.

Attention is called to the needs of many handicapped youths for further education, vocational guidance, and training if they are to be settled into productive and satisfying roles in adult life. At present there are many gaps in the services available to them in the difficult years after school leaving. The reports are a timely reminder to all concerned, school doctors, youth employment officers, industrial medical officers, and welfare workers in particular, of the danger that the work of the well developed system of special education for handicapped children should be undone for lack of adequate follow-up services for school-leavers.

JOYCE LEESON

Safe Handling of Radioactive Materials. Handbook No. 92. Recommendations of the National Committee on Radiation Protection. (Pp. ix + 107; 40 cents.) Washington, D.C.: U.S. Department of Commerce, National Bureau of Standards. 1964.

In this handbook, which supersedes Handbook 42 issued in 1949, an attempt is made to include the main considerations of safety in the handling of radioactive materials gained from experience in research and the atomic energy industry.

The present handbook has been produced with reference to the adequate protection of the user in research and industry generally, where the quantities of radioactive material and the complexities of operation are not as great as in the atomic energy industry.

The handbook will be especially useful to all those concerned with the safe use of radioactive materials as a supplement to any local regulations. This well sectioned set of recommendations includes 87 entitled references.

G. E. HARRISON

Radioactivity. Handbook No. 86. Recommendations of the International Commission on Radiological Units and Measurements. (Pp. viii + 53; 40 cents.) Washington, D.C.: United States Department of Commerce, National Bureau of Standards. 1963.

One of the important objects of the International Commission on Radiological Units and Measurements is to collect and evaluate the latest data and to make recommendations on the measurements of radioactivity and dosimetry. The present handbook is one of a new series, each of which is intended to cover development in a special field.